

AIRNow Gateway

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The US EPA's AIRNow system is a nationwide, voluntary program that provides real-time air quality data and forecasts to protect public health across the United States, Canada, and parts of Mexico. AIRNow receives real-time ozone and PM2.5 data from 1,800 monitors and collects forecasts from 300 cities. Over its eight-year history, AIRNow has an established track record of evolving to continue to meet users' needs. AIRNow has recently expanded to acquire other pollutant data and meteorological measurements to further establish AIRNow as the key data resource for integrated, nationwide, real-time air quality measurements and forecasts.

The AIRNow Gateway System is an upcoming project that will provide real-time data to the scientific, research, and educational communities to improve forecasting and public health protection. AIRNow Gateway is an off-site, mirrored database hub and broadcast feed for providing and delivering AIRNow data to interested parties. AIRNow Gateway will provide the opportunity for the vast user community to have full, open, and easy access to the AIRNow data needed to further science, support operational systems, and aid in better decision-making. This community includes scientists and researchers at universities, government labs and agencies, foreign environmental agencies, the private sector, institutions developing operational models and decision support systems, and teachers and educators. The sharing of AIRNow data will facilitate further scientific exploration, validate forecasting models, educate our youth, and promote better understanding of air quality data and issues in our society. AIRNow Gateway is a logical expansion to meet the growing needs of the user and Global Earth Observation System of Systems (GEOSS) community.

The AIRNow program spans the continuum from data collection to knowledge and decision-making by assembling and distributing hourly air quality information (real-time data and forecasts) for the United States and Canada. However, these valuable data and information are currently not readily accessible by other EPA programs and outside organizations whose applications and programs could utilize AIRNow data to improve their products for decision-makers and the public. Broad and fast distribution of AIRNow data will greatly enhance and promote the advancement of air quality research and, thus, the understanding and education of the American public concerning air quality issues. AIRNow Gateway will provide an opportunity for interested outside parties to integrate these rich data sets into their applications or programs to better achieve mission or project success.

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